



# LAYERNEER®



## USER GUIDE

VERSION 1.11

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# ABOUT



## Thermal Dynamic

Parts Stick @ Hot Then Release @ Cool



## LOW ODOR

No Harsh Smells.  
No Headaches.



## MULTI FILAMENT

PLA, ABS, PETG, ASA  
and More



## WATER SOLUBLE

Easy Touch Up.  
Easily Removed.



## PREVENTS WARPING

Reduce Need for  
Build Plate Adhesion



## NO-MESS APPLICATOR

No Accidental Spills.  
Ever!



## LONG LASTING

Print Multiple Times  
Easy Retouch

We have all experienced the frustration of having a part warp or break free from the build plate after hours of printing or struggled to remove a part once finished.

**BED WELD - ORIGINAL™** solves these challenges by providing a thermal dynamic coating that is optimized for adhering that critical first layer to the build plate at hot temperatures, and then morphing as your build plate cools to make part removal simple and easy.

It is water soluble, allowing you to easily touch up the coating with a damp sponge, or remove the coating with minimal effort. You can typically get several prints out of a single application, resulting in hundreds of prints per bottle.

**BED WELD - ORIGINAL™** is optimized for use with **PLA, ABS, ASA, PETG, CPE** and **PVA** filament types in **FUSED FILAMENT FABRICATION (FFF)**3D printers with heated glass build plates.

If you like **BED WELD** then help us spread the word by sharing your experiences in forums, FaceBook groups, twitter feeds, and blog post. Share pictures of your prints. We appreciate your feedback and would love to see what you have created! It drives us to improve our products and create new innovative solutions.

## CONNECT WITH US!



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## GETTING STARTED

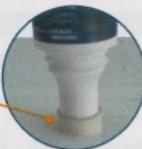
**A** SHAKE WELL, and then remove outer cap.

**B** Apply at room temperature. Do not apply while the bed is hot.  
Compress foam tip down on build plate while gently squeezing the bottle to release some content. A little goes a long way!



**C** Release downward pressure on foam tip. Then, use the tip to evenly spread a thin coating over the entire build plate.

Release Pressure On Tip.  
Spread a Thin Even Coating  
(Thinner Is Better)



**D** Heat your build plate to dry the coating. **IMPORTANT!** Follow recommended bed temperatures for your filament type.

**E** Print your part. Once the print is complete, let the build plate cool. As your build plate nears room temperature, you will hear popping and crackling sounds as your part releases from the build plate.

**F** If your part does not detach itself or easily by hand, use the edge of a razor blade as a lever to lift a corner or edge. It should release with little effort.

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## 5 TIPS TO HELP YOU SUCCEED

**TIP #1** - SHAKE WELL before each use! Apply to a clean bed surface that is free from acetone, soap, or other chemicals. Fabric softeners on drying towels, and chemicals such as 70/30 isopropyl alcohol can leave residue on the bed, which can prevent Bed Weld from spreading smoothly.

**TIP #2** - Use filament that has not been compromised by humidity. Print in a temperature-controlled environment that avoids drafts, and use the following bed temperature recommendations:

PLA 60C | ABS 80C | ASA 100C | PETG 80C

*Note 1: Turn off printers "Economic Mode" so bed temperature remains on.*

*Note 2: Extreme adhesion can occur at higher bed temps. If you have trouble with part removal then cool your bed to room temp. Then, place your bed in a freezer for 15 minutes. Remove the bed from the freezer, and place it on a counter at room temp. After a few minutes, the bed will condense with fog. The water-soluble BED WELD will begin to release your part automatically.*

*If your part is not sticking well, or if it is not releasing as expected, then check your bed temperature with an external infrared temperature gun to confirm the bed temp is close to the recommended temps being programmed into the printer.*

**TIP #3** - Removing or replacing the coating is easy! Simply rinse your build plate under warm water. Using soap and a scrub pad can further speed up the process.

**TIP #4** - Store at room temp out of direct sunlight. Replace the cap to prevent the tip from drying out. If accidentally left off, you can wash the foam applicator in warm water to soften it. Avoid pressing down on the red valve while rinsing to prevent contaminating the bottle with tap water.

**TIP #5** - To rejuvenate the coating, place a few drops of water in various locations on the bed, then use a foam brush, or the applicator to respread the coating around. Heat the bed to dry, then you are ready to print again!

## SUPPORT AND SAFETY

Do you still have questions or continued adhesion/release issues? Contact LAYERNEER'S industry-leading support team for assistance.

Let's face it, there are a lot of variables and things that can go wrong when 3D printing. We've helped newcomers, and seasoned pros, get to the bottom of complex 3D printing issues. Please do not hesitate to reach out for support.

**ONLINE:** [layerneer.com/support](http://layerneer.com/support)

**EMAIL:** [support@layerneer.com](mailto:support@layerneer.com)

**PHONE:** +1 (650) 308-8976

### SAFETY INFO

BED WELD - ORIGINAL is considered a non-hazardous material. Please review our Safety Data Sheet (SDS) for complete details about safe storage and safe handling recommendations. The SDS can be downloaded from the following location:

[layerneer.com/safety](http://layerneer.com/safety)

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## "FREE" DOWNLOADS

GO TO...

[layerneer.com/downloads](http://layerneer.com/downloads)

### NEED A WARP TESTER?

Download the "*Sure Warps A Lot*"



### SAVE YOUR FOAM TIP!

Create a BED WELD touch up tool.

Download the "**Toucher Upper**"



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# COMPATIBILITY GUIDE

## FILAMENT TYPES

ABS	✓	80°C
ASA	✓	100°C
PETG	✓	80°C
PLA	✓	60°C
PET/CPE	✓	80°C
PVA	✓	-

NYLON / PP / \*TPU 95A ✗

\*TPU 95A - Adhesion is greatly improved but may still require use of a brim.

## BED TEMP

## ADDITIONAL TIPS

- Make sure "Energy Saving Mode Is Off" on your printer by setting the "Economic" feature to "Off". This prevents the bed heater from turning off during the print, which would release the part.
- Avoid printing above recommended bed temperatures.
- Dehydrate your filament for best results.
- A printer enclosure is recommended for ABS.

## BED SURFACE TYPES

## SURFACE TYPE TIPS

BOROSILICATE GLASS ✓

- Our preferred bed type for best results

CARBORUNDUM COATED GLASS ✓

KAPTON TAPE ✓

POLYPROPYLENE ✓

GAROLITE ✓

SMOOTH PEI ✓

TEXTURED PEI ✗

- Flaking can occur on some brands of textured PEI. Try glass!

ALUMINUM ✗

- Solution: Apply Kapton tape on top of aluminum beds.

CREALITY FLEXSHEETS ✗

- Solution: Upgrade to Creality Carborundum glass bed.

MICROPOROUS COATED GLASS ✗

- Early versions of microporous coated beds were not supported. Newer Carborundum coated glass is compatible. Additionally, you can flip the bed over and apply to the uncoated glass side.

